### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| First N  | lamed Applicant: Bell   | )           | Art Unit: 3621  |
|----------|---|-------------|---|
| Serial . | No.: 09/448,253   | <i>)</i>    | Examiner: Sherr   |
| Filed:   | November 24, 1999   | )           | AM9-99-0122   |
| For:     | SYSTEM AND METHOD FOR AUTHORIZED COMPRESSION OF DIGITIZED MUSIC | )<br>)<br>) | March 18, 2005<br>750 B STREET, Suite 3120<br>San Diego, CA 92101 |

## APPEAL BRIEF

Commissioner of Patents and Trademarks Washington, DC 20231

Dear Sir:

This brief is submitted under 35 U.S.C. §134 and is in accordance with 37 C.F.R. Parts 1, 5, 10, 11, and 41, effective September 13, 2004 and published at 69 Fed. Reg. 155 (August 2004). This brief is further to Appellant's Notice of Appeal filed herewith.

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## (1) Real Party in Interest

The real party in interest is IBM Corp.

### (2) Related Appeals/Interferences

No other appeals or interferences exist which relate to the present application or appeal.

#### (3) Status of Claims

Claims 1-8 and 13-24 are pending and finally rejected, and Claims 9-12 are canceled.

#### (4) Status of Amendments

No amendments are outstanding.

# (5) Concise Explanation of Subject Matter in Each Independent Claim, with Page and Figure Nos.

As an initial matter, it is noted that according to the Patent Office, the concise explanations under this section are for Board convenience, and do not supersede what the claims actually state, 69 Fed. Reg. 155 (August 2004), see page 49976. Accordingly, nothing in this Section should be construed as an estoppel that limits the actual claim language.

Claim 1 recites a computer-based system (10, figure 1, page 5, first paragraph under "Detailed Description") for inhibiting unauthorized recording of digitized music that includes a cryptography module (14, id.) which in turn includes logic that can be executed by a provider computer (12, id.) The logic includes, for at least a segment of the music, obtaining an authorized digital signature, and then associating

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the authorized digital signature with the music. The authorized digital signature is obtained solely by hashing

the segment with a cryptographic hash function (block 32, figure 2, page 7, lines 6-14) without user

identification being used. The system also includes a consumer module associated with a consumer music

player (18, 20, 21, figure 1, page 5) and executable thereby to undertake logic. This latter logic includes

processing the segment of the music to obtain a test digital signature, and, only if the test digital signature

matches the authorized digital signature, permitting compression and/or recording of the music on the

consumer music player, figure 3, pages 8 and 9, ending at block 58).

The references above are incorporated into this paragraph. Claim 13 sets forth a method for

facilitating the compression and storage, on a personal music player, of digitized music received on a disk

(16, figure 1, page 5) in an authorized transaction. The method of Claim 13 includes recording the music

on the disk along with an authorized digital signature derived solely by applying a cryptographic hash to the

music without recording a user identification on the disk. The disk is received and engaged with a personal

music player compression device. The method then includes deriving a test digital signature from the music,

and compressing the music and recording the music on the personal music player only if the test digital

signature matches the authorized digital signature.

The references above are incorporated into this paragraph. Claim 21 requires computer program

storage device including a program of instructions for determining whether a request to compress and record

digitized music should be honored. The program of instructions processes a segment of the music and only

the segment to obtain a test digital signature, and then receives an authorized digital signature associated with

the music. The program permits compression and recording of the music only if at least the test digital

signature matches the authorized digital signature.

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The references above are incorporated into this paragraph. Claim 23 recites a method for facilitating

the compression and storage, on a personal music player, of digitized music received on a disk in an

authorized transaction. The method includes engaging the disk with a personal music player compression

device, deriving at least one test digital signature solely from the music, and compressing the music and

recording the music on the personal music player only if the test digital signature matches a digital signature

received on the disk without checking for a user identification.

(6) Grounds of Rejection to be Reviewed on Appeal

(a) Claims 1-5, 7, 8, 13-17, and 19-24 have been rejected under 35 U.S.C. §102 as being

anticipated by Cookson, USPN 6,591,365.

(b) Claims 6 and 18 have been rejected under 35 U.S.C. §103 as being obvious over Cookson

in view of Moskowitz et al. USPN 5,822,432.

(7) Argument

As an initial matter, it is noted that the SPE has signed the latest Office Action, meaning that he has

approved the ground of rejection already and hence has no legitimate reason to now authorize either a new

rejection as part of an Answer or a reopening of prosecution. Indeed, it is noted that according to the Patent

Office, as a general proposition a new ground of rejection in an examiner's answer should be "rare", and

should be levied only in response to such things as newly presented arguments by Applicant or to address

a claim that the examiner previously failed to address, 69 Fed. Reg. 155 (August 2004), see, e.g., pages

49963 and 49980. This would seem to particularly militate against any response to an appeal brief other than

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an examiner's answer or a notice of allowance when, as here, the gravamen of the arguments below have

already been considered and rejected by both the examiner and her SPE.

(a) Cookson bears a filing date after the present filing date, and accordingly is not prior art to this

application. The rejections have been overcome.

Applicant notes that Cookson claims priority to a provisional patent application. MPEP §2136.03(III)

(8th Edition, Revision 2 dated May, 2004) requires that an alleged prior art patent or patent publication is

entitled to the filing date of an earlier-filed provisional filing date only "if the provisional application properly

supports the subject matter relied upon to make the rejection in compliance with 35 U.S.C. §112, first

paragraph".

What evidently has passed for the Cookson provisional are three handwritten pages and a single hand-

drawn figure that nowhere mentions much of the relied-upon content in Cookson that allegedly teaches the

present claims. By way of non-limiting example and using Claim 1 for illustration, the Cookson provisional

fails to mention:

(1) a cryptography module including logic executable by a provider computer;

(2) an authorized digital signature that is obtained solely by hashing the segment with a cryptographic hash

function (no mention is made of the digital signature being "authorized", much less that is derived using a

hash function);

(3) the fact that in deriving the signature no user identification is used;

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(4) at the player side ("consumer module"), processing at least the segment of the music to obtain a test

digital signature (no "test" digital signature is mentioned);

(5) only if the test digital signature matches the authorized digital signature, permitting at least one of:

compression of the music, and recording the music, on the consumer music player (the provisional nowhere

mentions a comparison of digital signatures).

Both the examiner and, by his signature on the Office Action, the SPE have responded to the above

observations by alleging that paragraph C of the Cookson provisional teaches "no user ID" being required

as otherwise argued by Appellant in (3) above. That is nonsense. Paragraph C states, in its entirety, "digital

sources which are secured and verified are passed directly from the access control F to the transcoding A and

to encryption I - or directly to encryption if transcoding isn't needed". As the Board will notice, nothing is

mentioned here of "digital signature". In the preceding paragraph (B) of the Cookson provisional, digital

signatures are mentioned "on the original CD or other recording that will not survive compression - the

opposite of a robust watermark", but note that nowhere does Cookson remotely indicate how the digital

signatures are obtained, much less that they are obtained solely by hashing the segment with a cryptographic

hash function, much less still that no user identification is to be used, as is otherwise required in independent

Claims 1, 7, and 13. Likewise, nothing in the Cookson provisional teaches deriving the digital signature by

processing a segment of music and only the segment (independent Claim 21) or deriving the digital signature

solely from the music (independent Claim 23).

The examiner and the SPE next point to paragraph B of the Cookson provisional to rebut Appellant's

argument "that the provisional version does not mention a test digital signature". This is a straw man.

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Appellant never argued that the Cookson provisional did not mention a digital signature, just that it failed to

provide written description of any way to derive the signature, much less in the way claimed.

Last, the examiner and SPE again point to paragraph B for the proposition that the Cookson

provisional teaches comparison of digital signatures. Paragraph B is at best hazy, and as best understood in

connection with the crude hand-drawn logic diagram in the Cookson provisional discusses using a watermark

and/or some indication of prior compression to decide whether to allow recording or compression (but,

importantly, evidently not both compression and recording, as is otherwise required by several of the present

claims, since the two activities appear to be mutually exclusive according to Cookson's intent.) In any case,

to the extent that the Cookson provisional discusses a comparison, it is of a watermark, not a digital

signature. Indeed, the very last sentence of paragraph B destroys the examiner's case. While the point of

this sentence remains cryptic, the one thing that can be gleaned for certain is that it explicitly distinguishes

the thing being compared (the watermark) from a digital signature.

Having thoroughly disposed of the rejections against the independent claims, attention now is directed

to the rejections of the dependent claims. The SPE and the examiner both cite paragraph B of the Cookson

provisional as a teaching of deriving respective digital signatures from respective segments of music. Nothing

remotely of the sort appears anywhere in the provisional. The allegation in the Office Action to the contrary

is a fabrication.

For similar reasons, the details of digital signature operation in Claims 3-5 likewise appear nowhere

in the Cookson provisional. The rejections of these claims must be reversed.

Appellant incorporates the comments above appropo responding to the rejections of the dependent

claims of the other claim sets.

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(b) Despite the fact that the SPE has signed off on the Office Action, the obviousness rejection on its face

fails to establish a prima facie case of obviousness under the law. Nowhere is any prior art suggestion to

combine the references as proposed even mentioned, much less properly identified, as is otherwise required

by MPEP §2142 et seq. Nowhere does the examiner or SPE explain why a reasonable expectation of success

of the proposed combination exists. And of course, for reasons amplified above, in fact not all claim

limitations have been identified in the prior art. That is, none of the three requirements of MPEP §2142 have

been met. Oh-for-three translates to a strikeout.

Respectfully submitted,

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#### APPENDIX A - APPEALED CLAIMS

1. A computer-based system for inhibiting unauthorized recording of digitized music, comprising:

a cryptography module including logic executable by a provider computer, the logic including, for at least a segment of the music, obtaining an authorized digital signature, and then associating the authorized digital signature with the music, the authorized digital signature being obtained solely by hashing the segment with a cryptographic hash function, no user identification being used; and

a consumer module associated with a consumer music player and executable thereby to undertake logic including processing at least the segment of the music to obtain a test digital signature, and, only if the test digital signature matches the authorized digital signature, permitting at least one of: compression of the music, and recording the music, on the consumer music player.

- 2. The system of Claim 1, wherein the cryptography module derives authorized digital signatures for respective plural segments of the music, and associates the authorized digital signatures with the music.
- 3. The system of Claim 2, wherein the consumer module determines test digital signatures for respective plural segments of the music, the consumer module preventing at least one of: compression of the music, and recording of the music, unless a predetermined relationship exists between test digital signatures and the authorized digital signatures.
- 4. The system of Claim 1, wherein the music is stored in a data stream on a disk, and the authorized digital signature is associated with the music by storing the authorized digital signature on the disk, apart from the stream.
- 5. The system of Claim 1, wherein the music is stored in a data stream on a disk, and the authorized digital signature is associated with the music by storing the authorized digital signature on the disk as part of the stream.
- 6. The system of Claim 1, wherein the authorized digital signature is tagged with a signature date, and the consumer module processes the music using a current key or an expired key having a key date equal to or later than the signature date.
- 7. A computer program storage device including a program of instructions for determining whether a request to compress and record digitized music should be honored, the program of instructions including:

computer readable code means for processing at least one segment of the music to obtain a test digital signature by applying a cryptographic hash solely to the segment without applying a user identification;

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computer readable code means for receiving an authorized digital signature associated with the music; and

computer readable code means for permitting compression and recording of the music only if at least the test digital signature matches the authorized digital signature.

8. The device of Claim 7, further comprising:

computer readable code means for determining test digital signatures for respective plural segments of the music; and

computer readable code means for preventing at least one of: compression of the music, and recording of the music, unless a predetermined number or percentage of matches exist between test digital signatures and authorized digital signatures.

13. A method for facilitating the compression and storage, on a personal music player, of digitized music received on a disk in an authorized transaction, comprising the acts of:

recording the music on the disk along with at least one authorized digital signature derived solely by applying a cryptographic hash to the music without recording a user identification on the disk:

receiving the disk;

engaging the disk with a personal music player compression device;

deriving at least one test digital signature from the music; and

compressing the music and recording the music on the personal music player only if the test digital signature matches the authorized digital signature.

- 14. The method of Claim 13, further comprising the acts of:
  deriving plural authorized digital signatures from respective segments of the music; and
  recording the plural authorized digital signatures on the disk.
- 15. The method of Claim 14, further comprising the acts of:
  deriving plural test digital signatures from plural segments of the music; and
  undertaking the compressing and recording act only if a predetermined number or percentage
  of matches exist between test digital signatures and authorized digital signatures.
- 16. The method of Claim 13, wherein the authorized digital signature is stored on the disk, apart from the music.
- 17. The method of Claim 13, wherein the authorized digital signature is stored on the disk in the music.
- 18. The method of Claim 13, wherein the authorized digital signature is tagged with a signature date, and the deriving act includes processing the music using a current key or an expired key having a key date equal to or later than the signature date.

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- 19. The system of Claim 4, further comprising a robust watermark on the disk.
- 20. The method of Claim 13, further comprising recording a robust watermark on the disk.
- 21. A computer program storage device including a program of instructions for determining whether a request to compress and record digitized music should be honored, the program of instructions undertaking method acts comprising:

processing at least one segment of the music and only the segment to obtain a test digital signature;

receiving an authorized digital signature associated with the music; and permitting compression and recording of the music only if at least the test digital signature matches the authorized digital signature.

- 22. The device of Claim 21, wherein the method acts further comprise:
  determining test digital signatures for respective plural segments of the music; and
  preventing at least one of: compression of the music, and recording of the music, unless a
  predetermined number or percentage of matches exist between test digital signatures and authorized
  digital signatures.
- 23. A method for facilitating the compression and storage, on a personal music player, of digitized music received on a disk in an authorized transaction, comprising the acts of:

engaging the disk with a personal music player compression device; deriving at least one test digital signature solely from the music; and compressing the music and recording the music on the personal music player only if the at least one test digital signature matches at least one digital signature received on the disk without checking for a user identification.

24. The method of Claim 23, further comprising the acts of:
deriving plural authorized test digital signatures from respective segments of the music; and
comparing the test digital signatures with authorized digital signatures on the disk.

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### **APPENDIX B - EVIDENCE**

None (this sheet made necessary by 69 Fed. Reg. 155 (August 2004), page 49978.)

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# APPENDIX C - RELATED PROCEEDINGS

None (this sheet made necessary by 69 Fed. Reg. 155 (August 2004), page 49978.)